

STIC-ADHESIVE Products Co., Inc.

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Technical Data Sheet

STIC-KOTE 8100 Series Epoxy Polyamide, Two-Component System (MIL-DTL-24441D, Type IV)

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DESCRIPTION

STIC-KOTE 8100 Series (MIL-DTL-24441D, Type IV) is a two-component Epoxy-Polyamide Coating System, specially formulated for immersion applications and to protect surfaces from environmental elements. Type IV is a two-coat system.

These paints are intended for use on sandblasted steel, aluminum, or fiberglass where a hard, durable, chemically resistant, non-porous coating is desired. This product is available in formulations as a primer, interior top coat, or exterior top coat. For painting particular areas aboard ship, such as bilges, tanks, and exterior underwater hull, refer to applicable Navy directives or technical manuals for instructions and selection of coating system.

MILITARY SPECIFICATION - QPD-24441-43

STIC-KOTE 8100 Series complies with Military Specification: MIL-DTL-24441D(SH), dated: 8/27/2009 and listed on QPD/QPL-24441-43 as STIC-KOTE 8100, dated: 9/20/2008.

APPLICATION PROPERTIES

- 1) Volatile Organic Compound: Less than 340 g/L, 2.8 lb/gal
(VOC EPA Method 24 Mixed System)
- 2) Mix Ratio (by volume): 1:1
Component A = (Polyamide): 1 part
Component B = (Epoxy): 1 part
- 3) Pot Life (@ 23 °C (73 °F)): 4 hours, minimum
- 4) Drying Times (@ 23 °C (73 °F)): 8 hours, maximum
- 5) Volume Solids:

<u>Color</u>	<u>Formula</u>	<u>Volume Solids</u>
Green Primer	Formula 150	66.5 ± 2%
Haze Gray	Formula 151	66.6 ± 2%
White	Formula 152	67.3 ± 2%
Dark Gray Ro 1.8	Formula 153	66.7 ± 2%
Dark Gray Ro 3.6	Formula 154	66.5 ± 2%
Dark Gray Ro 6.0	Formula 155	66.4 ± 2%
Red	Formula 156	66.7 ± 2%
Gray	Formula 157	66.5 ± 2%
Yellow	Formula 158	67.2 ± 2%
Black	Formula 160	60.2 ± 2%
Yellow	Formula 161	60.2 ± 2%
Red	Formula 162	60.2 ± 2%

USE PROPERTIES

- 1) Shelf Life: 2 years from date of manufacture (if unopened)
- 2) Flash Point (SETA): Part A: 99°F (37° C)

TECHNICAL DATA SHEET

	Part B: 100°F (38° C)
3) Reducer:	Do not reduce
4) Tinting:	Do not tint
5) Clean Up:	Aromatic Naptha
6) Brush and Roller Recommendation:	Natural bristle brush 3/8" woven roller cover with solvent resistant core
7) Application Temperature:	40°-90°F (4.4°-32.2° C) for surface and ambient air; >60°F for paint NOTE: need to be at least 5°F above dew point
8) Application Humidity:	Maximum of 85% relative humidity
9) Storage:	Store product in accordance with local, state and federal regulations. Keep container tightly sealed and store indoors in dry conditions at 50°-80°F (10°-26.7°C).

RECOMMENDED COATING SYSTEMS

Steel and Aluminum:	1 coat MIL-DTL-24441D Type IV Primer, applied at 4-6 mils (100-150 microns) dry thickness; and 1 coat MIL-DTL-24441D Type IV Epoxy Paint, applied at 4-6 mils (100-150 microns) dry thickness.
Steel:	2 coats MIL-DTL-24441D Type IV Epoxy Paint, applied at 4-6 mils (100-150 microns) dry thickness
Steel (non-immersion application):	1 coat MIL-DTL-24441D Type IV Primer, applied at 4-6 mils (100-150 microns) dry thickness; and 1 coat MIL-PRF-24635E Silicone Alkyd Enamel, applied at 1.5-2.5 mils (40-63 microns) dry thickness.*

* can also use 2 coats MIL-DTL 24607B Chlorinated Alkyd Enamel, applied at 1.5-2.0 mils (40-50 microns)

SURFACE PREPARATION

Surface must be clean, dry and in sound condition, free from loose mill scales, dirt, dust, rust, oil and grease. Remove all loose scales, peeling, flaking paint, rust, corrosion and chalk from the surface before painting.

- 1) Steel, Iron
Non-immersion use surface prep: Solvent clean per SSPC-SP1 (removing oil, grease, dirt, and other foreign material); then prepare surface by Commercial Blast Cleaning per SSPC-SP6/NACE No. 3. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils/50 microns). For best results, follow surface prep instructions for immersion use.

Immersion use surface prep: Solvent clean per SSPC-SP1 (removing oil, grease, dirt, and other foreign material); then prepare surface by Near-White Metal Blast Cleaning per SSPC-SP10/NACE No. 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils/50 microns).

Prime bare steel within 8 hours or before flash rusting occurs.
- 2) Aluminum
Recommended surface prep: Solvent Cleaning per SSPC-SP1 (removing oil, grease, dirt, and other foreign material); then prepare surface by Brush-Off Blast Cleaning per SSPC-SP7/NACE No. 4.

TECHNICAL DATA SHEET

RECOMMENDED COVERAGE PER COAT (DRY FILM)

1) Coverage	<u>ft²/gal</u>	<u>m²/L</u>
Minimum:	200 ± 20 sq.ft.	4.9 ± 0.5 sq. meters
Maximum:	260 ± 20 sq.ft.	6.4 ± 0.5 sq. meters
2) Dry Film Thickness per coat:	4.0 - 6.0 mils (min/max)	100 - 150 microns (min/max)
3) Theoretical Coverage of Dry Film:		
Dry film thickness	1 mil	1,070 ft ² /gal
Dry film thickness	25 micron	26 m ² /L

Note: Brush or roller application may require multiple coats to achieve maximum film thickness.

RECOAT SCHEDULE @ 4 mil (100 microns) DRY FILM - 6 mil (150 microns) WET FILM

1) Temperature:	<u>50 ± 10 °F</u> (10 ± 5 °C)	<u>70 ± 10 °F</u> (21 ± 5 °C)	<u>90 ± 10 °F</u> (32 ± 5 °C)
2) Time: (minimum)	18 ± 1.0 hr	12 ± 1.0 hr	8 ± 1.0 hr
3) Cure time: (minimum)	5 Days	4 Days	3 Days

RECOMMENDED TWO COAT SYSTEM

		<u>Dry Film Thickness</u>	
		<u>(mils)</u>	<u>(microns)</u>
1 ST Coat:	MIL-DTL-24441 Type IV Primer	4.0 – 6.0	100 – 150
2 nd Coat:	MIL-DTL-24441 Type IV Topcoat	4.0 – 6.0	100 – 150

SAFETY

Refer to the Material Safety Data Sheet (MSDS) before using this product, for safe use, handling and storage.

OTHER INFORMATION

HEALTH AND SAFETY INFORMATION:

Refer to Material Safety Data Sheet for health and safety information before using this product. Also, for additional information, please visit the website at www.sticadhesive.com.

LIMITATION OF REMEDIES AND LIABILITY:

If the STIC-ADHESIVE product is proved to be defective, the exclusive remedy, at STIC-ADHESIVE'S option, shall be to refund the purchase price or replace the defective product. STIC-ADHESIVE shall not otherwise be liable for loss or damages, regardless of the legal theory, including but not limited to contract, negligence, warranty, or strict liability.

DISCLAIMER:

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